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RAW SEQUENCE LISTING DATE: 08/28/2001
PATENT APPLICATION: US/09/918,887 TIME: 14:25:40

Input Set : N:\Crf3\RULE60\09918887.txt
Output Set: N:\CRF3\08282001\I918887.raw

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Rybak, Susanna M.
Newton, Dianne L.
Goldenberg, David M.

(ii) TITLE OF INVENTION: Immunotoxins Directed Against Malignant Cells

(iii) NUMBER OF SEQUENCES: 3

(iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: Townsend and Townsend and Crew LLP
(B) STREET: Two Embarcadero Center, Eighth Floor
(C) CITY: San Francisco
(D) STATE: California
(E) COUNTRY: USA
(F) ZIP: 94111-3834

ENTERED

(v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:
C--> **(A) APPLICATION NUMBER: US/09/918,887**
C--> **(B) FILING DATE: 30-Jul-2001**
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:
(A) APPLICATION NUMBER: 09/071,672
(B) FILING DATE: 01-MAY-1998

(viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: Weber, Ellen Lauver
(B) REGISTRATION NUMBER: 32,762
(C) REFERENCE/DOCKET NUMBER: 015280-32510US

(ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: (415) 576-0200
(B) TELEFAX: (415) 576-0300

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 104 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 1
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa = Glu or pyroglutamic acid"

(ix) FEATURE:

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(A) NAME/KEY: Protein
(B) LOCATION: 1..104
(D) OTHER INFORMATION: /note= "RNase A derived from
Rana pipiens, "onc protein""
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

W--> **Xaa Asp Trp Leu Thr Phe Gln Lys Lys His Ile Thr Asn Thr Arg Asp**
1 5 10 15

Val Asp Cys Asp Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys Asp
20 25 30

Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
35 40 45

Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe Tyr
50 55 60

Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
65 70 75 80

Lys Ser Thr Asn Lys Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
85 90 95

His Phe Val Gly Val Gly Ser Cys
100

(2) INFORMATION FOR SEQ ID NO: 2:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 249 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

W--> **(ii) MOLECULE TYPE: DNA**

(ix) FEATURE:
(A) NAME/KEY: -
(B) LOCATION: 1..249
(D) OTHER INFORMATION: /note= "nucleic acid encoding
"onc protein""
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

GATGTTGATT GTGATAATAT CATGTCAACA AACTTGTTCC ACTGCAAGGA CAAGAACACT 60
TTTATCTATT CACGTCCTGA GCCAGTGAAG GCCATCTGTA AAGGAATTAT AGCCTCCAAA 120
AATGTGTTAA CTACCTCTGA GTTTTATCTC TCTGATTGCA ATGTAACAAG CAGGCCTTGC 180
AAGTATAAAT TAAAGAAATC AACTAATAAA TTTTGTGTAA CTTGTGAAAA TCAGGCACCA 240
GTTCATTTT 249

(2) INFORMATION FOR SEQ ID NO: 3:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 83 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: protein
(ix) FEATURE:
(A) NAME/KEY: Protein
(B) LOCATION: 1..83
(D) OTHER INFORMATION: /note= ""onc protein", positions 16-98
of SEQ ID NO:1"

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Asp Val Asp Cys Asp Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys
1 5 10 15

Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
20 25 30

Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe
35 40 45

Tyr Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu
50 55 60

Lys Lys Ser Thr Asn Lys Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
65 70 75 80

Val His Phe

VERIFICATION SUMMARY DATE: 08/28/2001
PATENT APPLICATION: **US/09/918,887** TIME: 14:25:42

Input Set : **N:\Crf3\RULE60\09918887.txt**
Output Set: **N:\CRF3\08282001\I918887.raw**

L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:104 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2